

Using this Monograph

Each of the following activity pages is divided into several sections. It must be noted that the descriptions in each of the boxes are written for teachers — the reading level required on each of these pages surpasses that reasonably expected at the lower elementary level.

At the top of the each page you will find the Objective behind each of the activities on that page. The code in the top right corner of the page shows the strand and substrand in which the objective is found, as well as the number of the objective. For example, the code N(NC)-04 stands for the fourth objective in the Number Concepts substrand of the Number strand. Each objective is quoted directly from the Grade 2 list in the Western Canadian Protocol document.

The largest box on the page (checkerboard pattern) contains a hands-on Representation or Activity for each objective. The graphic in the top right corner of the page identifies the materials used in this activity/representation.

Some activities may be completed as a whole class; some may be more effective when completed individually or in small groups. The box at the bottom left of the page provides two Adaptations: upward, for students needing a

greater challenge, and downward, for students who might find the activity too challenging.

Each page also contains a Problem Solving box with a single problem. It is intended that each problem require the student to engage the objective listed at the top of the page in order to successfully solve the problem. The problems range widely in level of difficulty, with some being fairly easy for Grade 2 students while others represent a more significant challenge. In the balloon superimposed over the problem box, the teacher will find a suggested strategy

for solving the problem, and the answer. Complete solutions (where possible) are listed at the back of the monograph.

Finally, in the bottom right corner of each activity page the teacher will find a Writing Corner. Each writing activity represents a sample activity that could be

given to students when teaching the given objective. There is a broad range of writing ability in the primary grades, and teachers may find that they need to adapt the activities to suit the writing levels within their particular class.

Objective: Recognize patterns from one side to another: unambiguous diagrams, 1 letter, 1 color, 1 shape, 1 position.

Materials: paper, pencil, pattern blocks, 100 chart, crayons

Instructions:

- Make a chart of the different pattern blocks, listing one of the following activities beside each type of block: bank, work, snap fingers, tap toe, clap, touch nose
- Now make a pattern with any 2 pattern blocks and then act it out. For example,
 - tap tap tap tap tap tap tap tap tap tap
- Draw your pattern on a piece of paper. Write the actions under each block
- Now write the color under each block. Now pick a different letter for each type of block and write that letter under each one

Problem Solving: Janrod created a train of pattern blocks that looked like this. What color was the 40th block?

Strategy: *Look for a pattern.*

Writing Corner: In your own words, what is a pattern? Give two examples and tell why they are patterns.

Adaptations:

- UPWARD:** List the colors of pattern blocks (change to 3) and repeat the activity.
- DOWNWARD:** Draw a pattern using 2 kinds of blocks. Draw a number on top of the blocks and make a story (e.g., 1, 2, 3, 4, 5, 6, 7, 8, 9, 10). Just "count" up to the number.